UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,128	02/27/2004	Dustin L. Green	MS1-1434US	7352

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LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

EXAMINER
WEIDNER, TIMOTHY J

ART UNIT	PAPER NUMBER
2609	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

Office Action Summary		Application No.	Applicant(s)
		10/789,128	GREEN ET AL.
		Examiner	Art Unit	
		Timothy Weidner	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *27 February 2004*.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-54* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-54* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *27 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :5/11/06, 11/27/06, 3/9/07, 6/1/07.

DETAILED ACTION

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The abstract of the disclosure is objected to because the legal phraseology of lines 9 and 10 is implied, and should be removed. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-33, 42, and 50-54 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Processor-readable medium referred to in paragraphs 193, 195, and 196 of the detailed description suggests "data in a modulated data signal, such as a carrier wave or other transport mechanism," which is a form of energy not falling into one of the four statutory categories of invention, i.e. it is not a process, machine, manufacture, or composition of matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 11, 12, 25, 26, 28, 32-35, 37, 41-45, 49-52, and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (U.S. 2003/0037331 A1).

Regarding claims 1, 25, and 34, Lee teaches a processor-readable medium having processor-executable instructions that, when executed by a processor, performs a method comprising: requesting a target multicast media-stream transmission (paragraphs 0016, 0041, 0099; figure 2, item 210; "in response to a user request ... merging the user into a pre-scheduled multicast"); receiving a unicast acquisition media-stream transmission (paragraphs 0044, 0051; "the client is admitted to receive the video, at least initially, through a dynamically initiated transmission ... every transmission over the dynamic channels must be a unicast"), where the content of the unicast acquisition media-stream transmission corresponds to that of the target multicast media-stream transmission (paragraph 0048; "dynamically admitted user receives at least a part ... eventually merged into one of the pre-scheduled multicasts to receive the remainder part"); decoding and presenting the content of the unicast acquisition media-stream transmission (paragraphs 0050, 0093; "viewing the dynamically initiated transmission" where decoding is inherent in viewing MPEG-4 video); switching reception from the unicast acquisition media-stream transmission to the target multicast media-stream transmission (paragraph 0050; "the dynamically admitted user leaves the dynamically admitted transmission and ... has been patched into, or merged into, the multicast").

Regarding claim 2, Lee teaches receiving an indication to change to a new channel, the new channel being the target multicast media-stream transmission (paragraphs 0041, 0099; "the user resumes playback ... determine the nearest multicast channel"); requesting the target multicast media-stream transmission, wherein the transmission is representative of the new channel (paragraphs 0016, 0041, 0099; "locate and merge back into an existing static multicast channel").

Regarding claim 3, Lee teaches receiving an indication to change to a new channel, the new channel being represented by the target multicast media-stream transmission and the unicast acquisition media-stream (paragraph 0103-0105; "the user initiates seeking ... the seek position lies outside the client buffer ... if more precise seeking is needed, then a dynamic [unicast, refer to claim 1] channel is used to merge the client back to an existing static multicast channel"); requesting the unicast acquisition media-stream which corresponds to the target multicast media-stream transmission (paragraphs 0021, 0041, 0105; "receiving at least one request ... a dynamic [unicast, refer to claim 1] channel is used to merge the client back to an existing static multicast channel").

Regarding claim 4, Lee teaches presenting the decoded content of the unicast acquisition media-stream transmission (paragraphs 0050, 0093; "viewing the dynamically initiated transmission" where decoding is inherent in viewing MPEG-4 video).

Regarding claims 5, 26, and 35, Lee teaches decoding and presenting the decoded content of the target multicast media-stream transmission after the switching

(paragraphs 0019, 0050, 0093; "view content from ... the in-progress pre-scheduled multicast" where decoding is inherent in viewing MPEG-4 video).

Regarding claims 7, 28, 37, and 45, Lee teaches frame properties of the unicast acquisition media-stream transmission match those of the target multicast media-stream transmission (paragraphs 0051, 0093; "receive two multicast channels concurrently ... given a video bit-rate of 3 Mbps, a total of 6 Mbps ... will be needed ... when the client is dynamically admitted" where "every transmission over the dynamic channels must be a unicast").

Regarding claims 11, 32, 41, and 49, Lee teaches the streams are MPEG-4 video (paragraphs 0093, 0178), and since the MPEG-4 stream inherently comprises I-frames (random-access points), the switching/splicing occurs during or close to the reception of a random-access point (RAP) in the target multicast media-stream transmission.

Regarding claims 12, 33, and 42, Lee teaches a computing device comprising: a media-stream presentation device (figure 5, item 110a); a medium as recited in claims 1, 25, and 34 respectively.

Regarding claim 43, Lee teaches a multimedia system comprising: a receiver configured to receive both a unicast acquisition media-stream transmission and a target multicast media-stream transmission (paragraphs 0041, 0051, 0093; "each client has the capability to receive two multicast channels ... the client is dynamically admitted" where "every transmission over the dynamic channels must be a unicast"); a decoding unit configured to decode both a unicast acquisition media-stream transmission and a

target multicast media-stream transmission (paragraphs 0019, 0050, 0093; "view

content from ... the in-progress pre-scheduled multicast ... viewing the dynamically

initiated transmission ..." where decoding is inherent in viewing MPEG-4 video); a

splicing unit configured to splice from the reception of the unicast acquisition media-

stream to the reception of the target multicast media-stream transmission (paragraphs

0009, 0050, 0093; "the dynamically admitted user leaves the dynamically admitted

transmission and ... has been patched into, or merged into, the multicast").

Regarding claim 44, Lee teaches a channel-change unit configured to receive an

indication to change to a new channel and to request the target multicast media-stream

transmission; wherein the transmission is representative of the new channel

(paragraphs 0041, 0051, 0093, 0103-0105; "the user initiates seeking ... the seek

position lies outside the client buffer ... if more precise seeking is needed, then a

dynamic multicast channel is used to merge the client back to an existing static

multicast channel," where "every transmission over the dynamic channels must be a

unicast").

Regarding claim 50, Lee teaches a processor-readable medium having

processor-executable instructions that, when executed by a processor, perform a

method comprising: receiving a request for transmission of a target multicast media-

stream (paragraphs 0016, 0040, 0041, 0099; figure 2, item 210; "in response to a user

request ... locate and merge back into an existing static multicast channel"); transmitting

a unicast acquisition media-stream over a unicast communications network, where the

unicast acquisition media-stream corresponds to the target multicast media-stream

(paragraphs 0042, 0044, 0048, 0051; "the client is admitted to receive the video, at least initially, through a dynamically initiated transmission ... every transmission over the dynamic channels must be a unicast").

Regarding claim 51, Lee teaches preparing for transmission the unicast acquisition media-stream based upon the same original content of the corresponding target multicast media-stream (paragraphs 0044, 0048; figure 2, item 220; "it is determined whether the particular client should be admitted statically or dynamically ... dynamically admitted user receives at least a part ... eventually merged into one of the pre-scheduled multicasts to receive the remainder part").

Regarding claim 52, Lee teaches transmitting the requested target multicast media-stream over a multicast communications network (paragraphs 0042, 0045).

Regarding claim 54, Lee teaches a computing device comprising: a transmitting device for transmitting one or more media-streams via both unicast and multicast communications networks (figure 1, item 100; paragraphs 0042, 0045, 0051); a medium as recited in claim 50.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating
        obviousness or nonobviousness.

Claims 6, 27, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Lee (U.S. 2003/0037331 A1) as applied to claims 1, 25, and 34 respectively above,

in view of Keller-Tuberg (U.S. 2002/0024956 A1).

Regarding claims 6, 27, and 36, Lee teaches, in paragraphs 0053, 0062, "when a

client arrives for the video and is decided to be dynamically admitted ... the request that

is sent includes ... the value of the needed duration," and "when the longest duration ...

has been broadcast ... the dynamically initiated transmission can stop." Further, Lee

teaches dynamic channels may be either unicast or multicast (paragraphs 0051, 0075).

However, Lee does not teach requesting cessation. Keller-Tuberg, which is in

the same field of endeavor, teaches an end user volunteers disconnection from a flow

(paragraph 0077), which is the same as requesting cessation, so the routing device may

stop streaming the packets, at its discretion, to the end user. It would have been

obvious to one of ordinary skill in the art at the time the invention was made to have the

client of Lee request cessation of transmission of the unicast acquisition media-stream

transmission to have the routing device stop streaming packets at its discretion.

Claims 8, 9, 29, 30, 38, 39, 46, 47, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. 2003/0037331 A1) as applied to claims 1, 1, 25, 25, 34, 34, 43, 43, and 50 respectively above, in view of Chou (U.S. 6,637,031 B1).

Regarding claims 8, 29, 38, and 46, Lee teaches the unicast acquisition media-stream transmission and the target multicast media-stream transmission, but not that the frame properties of the acquisition stream do not match those of the target stream. Chou, which is in the same field of endeavor, teaches frame properties of the acquisition media-stream transmission do not match those of a main media-stream transmission (column 3, lines 29-37; "a first data stream is a low resolution stream encoded at a bit rate below the transmission bit rate ... a second data stream is a normal resolution stream encoded at a bit rate equal to the transmission bit rate") for the purpose of reducing the start-up or seek delay for interactive multimedia applications (column 3, lines 51-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the unicast acquisition media-stream transmission and the target multicast media-stream transmission where their frame properties do not match to reduce the start-up or seek delay for interactive multimedia applications.

Regarding claims 9, 30, 39, 47, and 53, Lee teaches the unicast acquisition media-stream transmission and its corresponding target multicast media-stream transmission, but not that the frames of the acquisition stream are encoded using a lower bit-rate than that used by the target stream. Chou teaches the frames of the acquisition media-stream are encoded using a lower bit-rate than that used by a

corresponding main media-stream (column 3, lines 29-37; "a first data stream is a low resolution stream encoded at a bit rate below the transmission bit rate ... a second data stream is a normal resolution stream encoded at a bit rate equal to the transmission bit rate") for the purpose of reducing the start-up or seek delay for interactive multimedia applications (column 3, lines 51-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the unicast acquisition media-stream transmission and its corresponding target multicast media-stream transmission where the frames of the acquisition stream are encoded using a lower bit-rate that that used by the target stream to reduce the start-up or seek delay for interactive multimedia applications.

Claims 10, 31, 40, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. 2003/0037331 A1) as applied to claims 1, 25, 34, and 43 respectively above, in view of Background of the Instant Application (herein, "Admission").

Regarding claims 10, 31, 40, and 48, Lee teaches the switching/splicing occurs, and that the streams are MPEG-4 video which inherently comprises random-access points (paragraphs 0093, 0178), but not that switching/splicing occurs before the reception of a random-access point (RAP) in the target multicast media-stream transmission. Admission teaches tuning to a channel and waiting for a random access point into the stream, where a channel change cannot occur until an access point is received for the purpose of accessing the target media stream (paragraphs 0026, 0030, 0031). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to have the switching/splicing occur before the reception of a

random-access point in the target multicast media-stream transmission to access the

target media stream.

Claims 13-18 and 20-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Lee (U.S. 2003/0037331 A1) in view of Chou (U.S. 6,637,031 B1).

Regarding claim 13, Lee teaches a processor-readable medium having

processor-executable instructions that, when executed by a processor, performs a

method comprising: receiving a normal bit-rate unicast intermediate media-stream

transmission (paragraphs 0044, 0051; "the client is admitted to receive the video, at

least initially, through a dynamically initiated transmission ... every transmission over

the dynamic channels must be a unicast"), which corresponds to a target multicast

media-stream transmission (paragraph 0048; "dynamically admitted user receives at

least a part ... eventually merged into one of the pre-scheduled multicasts to receive the

remainder part"); decoding the content of the unicast intermediate media-stream

transmission (paragraphs 0050, 0093; "viewing the dynamically initiated transmission"

where decoding is inherent in viewing MPEG-4 video); switching reception from the

unicast intermediate media-stream transmission to the target multicast media-stream

transmission (paragraph 0050; "the dynamically admitted user leaves the dynamically

admitted transmission and ... has been patched into, or merged into, the multicast").

Further, Lee teaches "prefix caching," where a patching unicast is used, then a

dynamically scheduled unicast or multicast, and then a pre-scheduled full multicast

(paragraphs 0051, 0092).

However, Lee does not teach receiving a low bit-rate media-stream transmission, decoding the content of it, or switching reception from it to the unicast intermediate media-stream transmission. Chou, which is in the same field of endeavor, teaches receiving a low bit-rate acquisition media-stream transmission, which corresponds to a target normal bit-rate media-stream transmission (column 3, lines 29-37; "the client receives the low resolution stream"); decoding the content of the acquisition media-stream transmission (column 3, lines 29-37; "decodes and presents the low resolution stream"); switching reception from the acquisition media-stream transmission to the intermediate media-stream transmission (column 3, lines 47-51; "server stops transmission of the low resolution stream and begins transmission of the normal resolution stream") for the purpose of reducing the start-up or seek delay for interactive multimedia applications (column 3, lines 51-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Lee's patching unicast, which corresponds to a dynamically scheduled unicast and a pre-scheduled full multicast, with Chou's low-bit rate acquisition stream, decode the content of the stream, and switch reception from Chou's low-bit rate acquisition stream to Lee's unicast intermediate stream to reduce the start-up or seek delay for interactive multimedia applications.

Regarding claim 14, Lee teaches receiving an indication to change to a new channel, the new channel being the target multicast media-stream transmission (paragraphs 0041, 0099; "the user resumes playback ... determine the nearest multicast channel"); requesting the target multicast media-stream transmission, wherein

the transmission is representative of the new channel (paragraphs 0041, 0099; "locate

and merge back into an existing static multicast channel").

Regarding claim 15, Lee teaches a patching unicast (unicast acquisition media-

stream transmission), but not presenting the decoded content of it. Chou teaches

presenting the decoded content of the acquisition media-stream transmission (column

3, lines 29-37; "decodes and presents the low resolution stream") for the purpose of

reducing the start-up or seek delay for interactive multimedia applications (column 3,

lines 51-54). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to present the decoded content of the unicast acquisition media-

stream transmission to reduce the start-up or seek delay for interactive multimedia

applications.

Regarding claim 16, Lee teaches presenting the decoded content of the

intermediate media-stream transmission (paragraphs 0050, 0093; "viewing the

dynamically initiated transmission").

Regarding claim 17, Lee teaches presenting the decoded content of the

intermediate media-stream transmission after the switching from the unicast acquisition

media-stream transmission (paragraphs 0050, 0092, 0093; "viewing the dynamically

initiated transmission" where decoding is inherent in viewing MPEG-4 video).

Regarding claim 18, Lee teaches decoding and presenting the content of the

target multicast media-stream transmission after the switching from the intermediate

media-stream transmission (paragraphs 0019, 0050, 0092, 0093; "view content from ...

the in-progress pre-scheduled multicast" where decoding is inherent in viewing MPEG-4 video).

Regarding claim 20, Lee teaches frame properties of the unicast intermediate media-stream transmission match those of the target multicast media-stream transmission (paragraphs 0051, 0093; "receive two multicast channels concurrently ... given a video bit-rate of 3 Mbps, a total of 6 Mbps ... will be needed ... when the client is dynamically admitted" where "every transmission over the dynamic channels must be a unicast").

Regarding claim 21, Lee teaches a patching unicast (unicast acquisition media-stream transmission) and the target multicast media-stream transmission, but not that their frame properties do not match. Chou teaches frame properties of the acquisition media-stream transmission do not match those of a main media-stream transmission (column 3, lines 29-37; "a first data stream is a low resolution stream encoded at a bit rate below the transmission bit rate ... a second data stream is a normal resolution stream encoded at a bit rate equal to the transmission bit rate") for the purpose of reducing the start-up or seek delay for interactive multimedia applications (column 3, lines 51-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the unicast acquisition media-stream transmission and the target multicast media-stream transmission where their frame properties do not match to reduce the start-up or seek delay for interactive multimedia applications.

Regarding claim 22, Lee teaches a patching unicast (unicast acquisition media-stream transmission) and the intermediate media-stream transmission, but not that the

frames of the acquisition stream are encoded using a lower bit-rate than that used by the intermediate stream. Chou teaches the frames of the acquisition media-stream transmission are encoded using a lower bit-rate than that used by the intermediate media-stream transmission (column 3, lines 29-37; "a first data stream is a low resolution stream encoded at a bit rate below the transmission bit rate ... a second data stream is a normal resolution stream encoded at a bit rate equal to the transmission bit rate") for the purpose of reducing the start-up or seek delay for interactive multimedia applications (column 3, lines 51-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the unicast acquisition media-stream transmission and the intermediate media-stream transmission where the frames of the acquisition stream are encoded using a lower bit-rate that that used by the intermediate stream to reduce the start-up or seek delay for interactive multimedia applications.

Regarding claim 23, Lee teaches a patching unicast (unicast acquisition media-stream transmission) and the target multicast media-stream transmission, but not that the frames of the acquisition stream are encoded using a lower bit-rate than that used by the target stream. Chou teaches the frames of the acquisition media-stream transmission are encoded using a lower bit-rate than that used by a main media-stream transmission (column 3, lines 29-37; "a first data stream is a low resolution stream encoded at a bit rate below the transmission bit rate ... a second data stream is a normal resolution stream encoded at a bit rate equal to the transmission bit rate") for the purpose of reducing the start-up or seek delay for interactive multimedia applications

(column 3, lines 51-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the unicast acquisition media-stream transmission and the target multicast media-stream transmission where the frames of the acquisition stream are encoded using a lower bit-rate that that used by the target stream to reduce the start-up or seek delay for interactive multimedia applications.

Regarding claim 24, Lee as modified by Chou teaches a computing device comprising: a media-stream presentation device (Lee; figure 5, item 110a); a medium as recited in claim 13.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. 2003/0037331 A1) in view of Chou (U.S. 6,637,031 B1) as applied to claim 13 above, and further in view of Keller-Tuberg (U.S. 2002/0024956 A1).

Regarding claim 19, Lee teaches, in paragraphs 0053, 0062, "when a client arrives for the video and is decided to be dynamically admitted ... the request that is sent includes ... the value of the needed duration," and "when the longest duration ... has been broadcast ... the dynamically initiated transmission can stop." Further, Lee teaches dynamic channels may be either unicast or multicast (paragraphs 0051, 0075).

However, Lee does not teach requesting cessation. Keller-Tuberg teaches an end user volunteers disconnection from a flow (paragraph 0077), which is the same as requesting cessation, so the routing device may stop streaming the packets, at its discretion, to the end user. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the client of Lee request cessation of

transmission of the unicast acquisition media-stream transmission to have the routing

device stop streaming packets at its discretion.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Inoue et al. (U.S. 5,884,141) teaches near video-on-demand,

Ganek et al. (U.S. 5,724,646) teaches fixed video-on-demand, Levinberg (U.S.

2003/0060196 A1) teaches two-way satellite communication with separate unicast and

multicast channels, instant application with corresponding publication (U.S.

2005/0190781 A1), and application number 10/460,949 with corresponding publication

(U.S. 2004/0255328 A1) having common inventors and assignee teaches lead-in and

main video-stream transmissions.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Timothy Weidner whose telephone number is (571) 270-

1825. The examiner can normally be reached on Monday - Friday 7:30 AM - 5:00 PM,

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Garber can be reached on (571) 272-2194. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TJW